

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 2, 4, 5, and 8-25 are pending in the application, with claims 8, 15, and 22 being the independent claims. Claims 8-21 have been withdrawn from consideration. Claim 22 is sought to be amended. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Rejections under 35 U.S.C. § 103

Claims 2, 4-5, and 22-25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Applicants' admitted prior art of figure 3 [AAPA] in view of Yue, U.S. Patent No. 6,717,502 (Yue). Applicants respectfully traverse this rejection.

The combination of AAPA and Yue does not teach or suggest every element of Applicants' amended independent claim 22. Yue describes a balun including inductors 408, 410, and 414. (Yue, FIG. 4a; col. 3, lines 31-34). Inductors 408 and 410 are interleaved and in an embodiment, disposed in the same layer. (Yue, col. 3, lines 34-35). Inductor 414 is disposed on a different metal layer than inductors 408 and 410. (Yue, col. 3, lines 53-54). The balun of Yue transforms "a differential signal to a single ended signal and vice-versa." (Yue, FIGs. 4a and 4b1; col. 3, lines 31-34). As can be seen in FIG. 4a, the inductors 408 and 410 receive (as input) or generate (as output) the differential signal. Inductor 414 receives or generates the single-ended signal.

Thus, Yue does not teach or suggest an impedance matching circuit including a first in-silicon inductor and a second in-silicon inductor "wherein the first in-silicon inductor is interleaved with the second in-silicon inductor, wherein an input of the first in-silicon inductor and an input of the second in-silicon inductor receives a differential signal and an output of the first in-silicon inductor and an output of the second in-silicon inductor produces a differential signal, and wherein a first current in the first in-silicon inductor and a second current in the second in-silicon inductor flow in a same direction in corresponding turns of the first in-silicon inductor and the second in-silicon inductor," as recited in amended independent claim 22.

AAPA does not overcome all of the deficiencies of Yue relative to claim 22, described above. FIG. 3 of Applicants' specification illustrates a block diagram of an RF receiver circuit 300 including in-silicon inductors 302 coupled to the output of RF filter circuit 202 and an input of a low noise amplifier 206. (Specification, p. 3, lines 5-6). AAPA does not teach or suggest "the first in-silicon inductor is interleaved with the second in-silicon inductor, wherein an input of the first in-silicon inductor and an input of the second in-silicon inductor receives a differential signal and an output of the first in-silicon inductor and an output of the second in-silicon inductor produces a differential signal, and wherein a first current in the first in-silicon inductor and a second current in the second in-silicon inductor flow in a same direction in corresponding turns of the first in-silicon inductor and the second in-silicon inductor," as recited in amended independent claim 22.

For at least the above reasons, amended independent claim 22 is patentable over the combination of Yue and AAPA. Claims 2, 4, 5, and 23-25 depend from claim 22.

For at least these reasons, and further in view of their own features, claims 2, 4, 5, and 23-25 are patentable over the combination of Yue and AAPA. Reconsideration and withdrawal of this rejection is therefore respectfully requested.

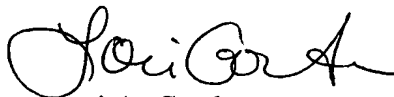
Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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